
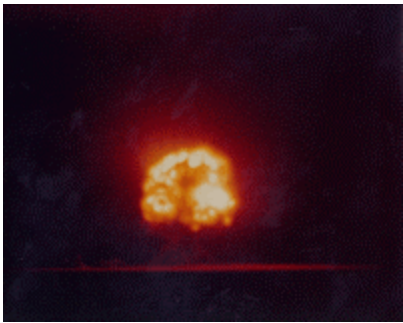


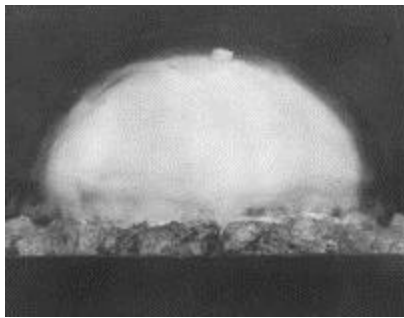
ATOMIC TESTING PHOTOGRAPHS

PHOTO No.	DESCRIPTION
 XX-31	TRINITY Event - The TRINITY Test was the first atomic test conducted by the United States. This test was detonated at Alamogordo, New Mexico on July 16, 1945.
 XX-18	TRINITY Event - The first nuclear test ever conducted. The TRINITY Event, a 19-kiloton tower test, was exploded July 16, 1945 in NM.



XX-120

TRINITY Event - Los Alamos, NM, the TRINITY fireball, 15 seconds after detonation of the first atomic bomb on July 16, 1945, rises into the air above the desert near the town of San Antonio, NM.



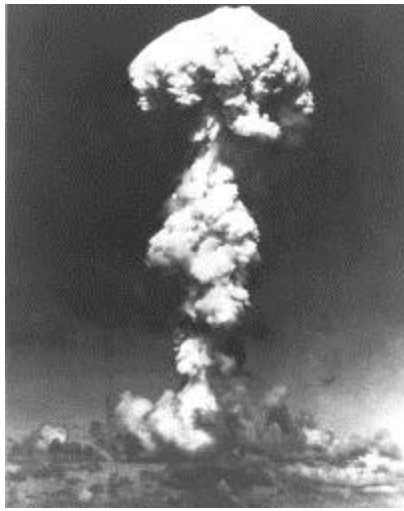
XX-104

TRINITY Event - Los Alamos, NM, the fireball of the TRINITY explosion, .053 seconds after detonation, as it shook the desert near the town of San Antonio, NM, 16 July 1945.



XX-121

Operation Crossroads, ALE Event - First atomic bomb test at Bikini Lagoon, ALE Day, 30 June 1946. The photograph shows the radioactive cloud still boiling up toward its maximum height of about 35,000 feet.



XX-111

Operation Crossroads, ABLE Event - The ABLE Event, mushroom cloud attaining a height of 5 miles after the ABLE test explosion at Bikini; ABLE test was one of the Crossroads series, 30 June 1946..



XX-71

Operation Crossroads, BAKER Event - The BAKER Test was detonated on the Bikini Atoll on 24 July 1946.



XX-113

Operation Crossroads, BAKER Event - Bikini BAKER Day, the mushroom cloud and first stages of the base surge following the underwater BAKER explosion at Bikini; water is beginning to fall back from the column into the lagoon, 24 July 1946.



XX-116

Operation Sandstone - Atom bomb tests at Enewetak, Marshall Islands, April and May 1948, Operation Sandstone. Initial burst of an atom bomb during the experimental tests at Enewetak.



XX-79

Operation Sandstone - Atom bomb tests at Enewetak, Marshall Islands, April and May 1948, Operation Sandstone. Detonation of an atom bomb during the experimental tests at the Enewetak Proving Grounds.



XX-109

Operation Sandstone - Atomic bomb tests at Enewetak, Marshall Islands, April and May 1948, Operation Sandstone - the fireball of an atomic bomb explosion during the experimental tests at Enewetak.



XX-110

Operation Sandstone - Atom bomb tests at Enewetak, April and May 1948, Operation Sandstone, the fireball of an atom bomb explosion emerges through cloud formation, forming into mushroom during test at Enewetak.



XX-08

Operation Ranger - January - February 1951 (There were five tests in this Series)



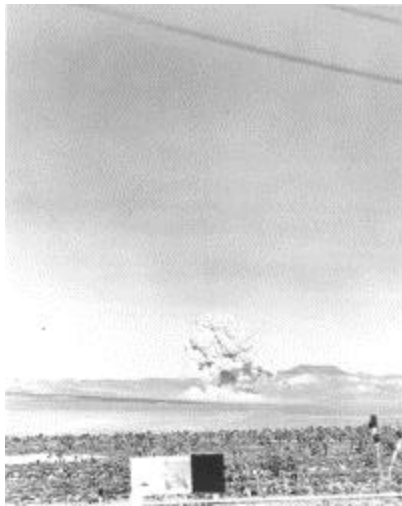
XX-27

Operation Buster-Jangle, CHARLIE Event - The CHARLIE Event was a 14-kiloton device, was dropped from a B-50 bomber on October 30, 1951 at Yucca Flat. The test, part of the Buster-Jangle series, was the eighth detonation at the Nevada Proving Grounds.



XX-29

Operation Buster-Jangle, EASY Event - The EASY Event, part of Operation Buster, was a 31-kiloton weapons related device detonated November 5, 1951 at the Nevada Test Site (NTS).



BJ-51-47

Operation Buster-Jangle - Nevada Proving Ground, fall 1951 atomic bomb explosion, MOUNTAIN-RINGED, an atomic cloud mushrooms upward during the Joint Atomic Energy-DOD Test Series (**Operation Buster**).



XX-77

Operation Buster-Jangle - Nevada Proving Ground atomic explosion; a dissipating atomic cloud dwarfs Army troops observing a detonation in the Joint AEC-DOD Test Series, fall 1951.



XX-09

Operation Greenhouse, GEORGE Event - The GEORGE Event, of the Greenhouse series, was a weapons related test conducted from a tower on Enewetak on 8 May 1951.



XX-58

Operation Ivy, MIKE EVENT - The MIKE Event, of the Operation Ivy series, was detonated on Enewetak on 31 October 1952. It was an experimental thermonuclear device.



XX-11

Operation Ivy, MIKE EVENT - The MIKE Event, of the Operation Ivy series, was detonated on Enewetak on 31 October 1952. It was an experimental thermonuclear device.



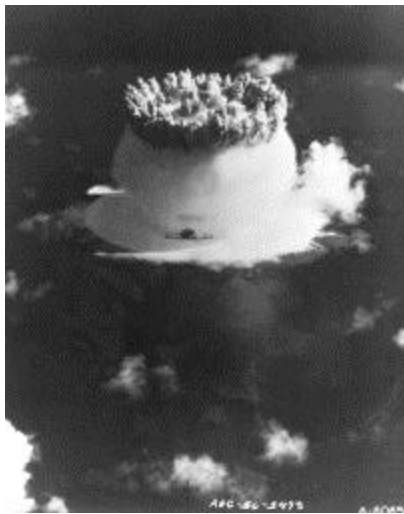
XX-51

Operation Ivy, MIKE EVENT - The gigantic fireball from MIKE -- the largest ever produced--measured 3.25 miles in diameter 31 October 1952.



XX-80

Operation Ivy, MIKE EVENT - Atomic bomb explosion taken at a height of approximately 12,000 feet, 50 miles from the detonation site; mushroom cloud rose 40,000 feet ten minutes after zero hour, 31 October 1952.



XX-112

Operation Ivy, MIKE EVENT - Photograph of atomic explosion of MIKE Event, Operation Ivy, 31 October 1952.



XX-42

Operation Ivy, KING Event - The KING Event was detonated on 15 November 1952, Enewetak Atoll.



XX-59

Operation Ivy, KING Event - The KING Event was detonated on 15 November 1952, Enewetak Atoll.



XX-78

Tumbler-Snapper Operation, CHARLIE EVENT - Atomic Test Site, Yucca Flat, NV, 22 April 1952; mushroom cloud rises over Yucca Flat, as dust cloud begins to form below; observers are shown in the foreground..



TS 52-40

Tumbler-Snapper Operation, CHARLIE EVENT - Atomic bomb explosion immediately after H-Hour, 0930 hours, the famous mushroom head cloud rises above the earth at the Nevada Proving Ground, 22 April 1952.



XX-060

Operation Upshot-Knothole, ANNIE EVENT - a tower event conducted on 17 March 1953.



XX-60

Operation Upshot-Knothole, ANNIE Event - Nevada Proving Grounds, atomic blast at Yucca Flat, AEC Nevada Proving Grounds, 17 March 1953; the smoke trails, made by rockets are used in blast measurement calculations.



XX-65

Operation Upshot-Knothole, NANCY Event was a weapons-related tower event detonated on 24 March 1953 at the Nevada Test Site (NTS).



XX-34

Operation Upshot-Knothole, BADGER Event was a 23-kiloton tower event detonated on 18 April 1953, at the Nevada Test Site (NTS).



UK 53-168

Operation Upshot-Knothole, ENCORE Event - Nevada Proving Ground, atomic detonation on 8 May 1953, at the AEC's Nevada Proving Ground.



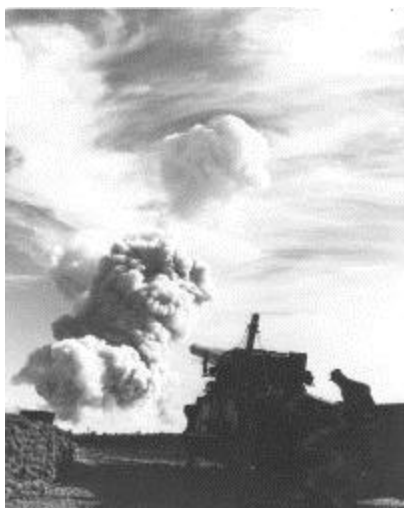
XX-044

Operation Upshot/Knothole, GRABLE Event - The First Atomic Canon - GRABLE was detonated on 25 May 1953.



315864

Operation Upshot/Knothole, GRABLE Event - The First Atomic Canon - GRABLE was detonated on 25 May 1953.



UK-53-164

Operation Upshot/Knothole, GRABLE Event - The First Atomic Canon - GRABLE was detonated on 25 May 1953.



XX-39

Operation Upshot Knothole, CLIMAX Event - The CLIMAX Event was a 61-kiloton device detonated on 4 June 1953, at the Nevada Proving Ground (NPG).



XX-92

Operation Castle, BRAVO Event - The BRAVO Event was an experimental thermonuclear device, 15-megaton weapons related surface event. Detonated 28 February 1954 on Bikini Atoll.



XX-92

Operation Castle, BRAVO Event - was detonated at Bikini Atoll on 28 February 1954.



XX-33

Operation Castle, ROMEO Event - The 11-megaton ROMEO Event was part of Operation Castle. It was detonated from a barge near Bikini atoll on 26 March 1954.



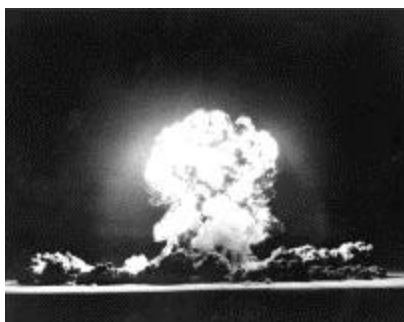
XX-90

Operation Teapot, WASP Event - Nevada Test Site, NV -
The first event of Operation Teapot, the spring 1955 series of nuclear tests at NTS, was detonated 18 February 1955. Pictured is nuclear cloud forming from fireball.



TEA-55-018

Operation Teapot, TURK Event - Nevada Test Site, NV -
The TURK Event was detonated on 7 March 1955 (30-35-DPY-11-2).



XX-119

Operation Teapot, BEE Event - Nevada Test Site, the 22 March 1955, Nuclear Test at Nevada Test Site .



TEA-55-27

Operation Teapot, ESS Event - Nevada Test Site, Sub-surface atomic event (23 March 1955), seventh in the 1955, Teapot Series at the Nevada Test Site (NTS).



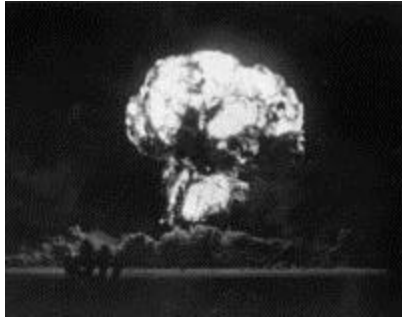
XX-114

Operation Teapot, MET Event - Nevada Test Site, the 15 April 1955, atomic event at Nevada Test Site (NTS).



TEA-55-47

Operation Teapot, MET Event - Nevada Test Site, the 15 April 1955 Atomic Test at Nevada Test Site.



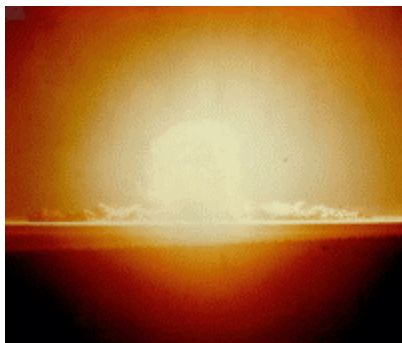
XX-118

Operation Teapot, APPLE-2 Event - Nevada Test Site, the 5 May 1955, Atomic Test at Nevada Test Site (NTS).



XX-45

Operation Teapot, APPLE-2 Event - Nevada Test Site, NV - The APPLE-2 Event, a 29-kiloton tower test, was detonated on 5 May 1955 at the Nevada Test Site.

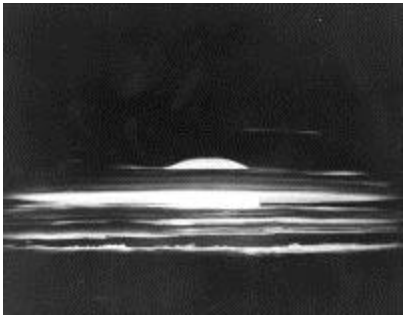

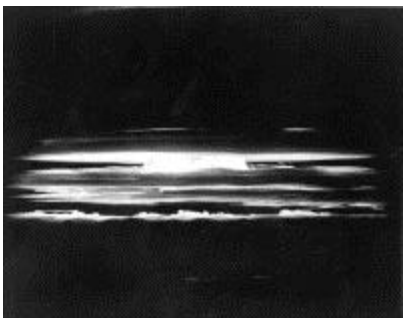


TEA-55-168

Operation Teapot, APPLE-2 Event - Nevada Test Site, NV - The APPLE-2 Event was detonated on 5 May 1955 at the Nevada Test Site.



Operation Redwing, CHEROKEE Event - Fireball of the 21 May 1956 test detonation over Bikini Atoll, photographed from the Control Ship, USS Estes, and showing formation of the stem on the horizon.

XX-102	
 <p data-bbox="332 636 440 667">XX-107</p>	<p data-bbox="625 363 1380 510">Operation Redwing, CHEROKEE Event - Fireball of 21 May 1956 test detonation over Bikini Atoll is shown as photographed from an aircraft at an altitude of 10,000 feet, approximately 50 miles SW of Ground Zero (GZ).</p>
 <p data-bbox="332 1066 440 1098">XX-105</p>	<p data-bbox="625 783 1425 898">Operation Redwing, CHEROKEE Event - Fireball of the 21 May 1956 test detonation over Bikini Atoll is shown here with high cloud layer silhouetted in foreground.</p>
 <p data-bbox="332 1491 440 1522">XX-106</p>	<p data-bbox="625 1213 1380 1360">Operation Redwing, CHEROKEE Event - Fireball of 21 May 1956 test detonation over Bikini Atoll. This was photographed from aircraft at 12,000 feet altitude and approximately 50 miles NW of the target.</p>



XX-103

Operation Redwing, CHEROKEE Event - Fireball of 21 May 1956 test detonation over Bikini Atoll. This was photographed from aircraft at 12,000 feet altitude and approximately 50 miles NW of the target.



XX-91

Operation Redwing, CHEROKEE Event - Fireball of 21 May 1956 test detonation over Bikini Atoll showing Cloud Chamber effect of pressure changes in air. This was photographed from aircraft at 12,000 feet altitude.



XX-117

Operation Redwing, CHEROKEE Event - Fireball of the 21 May 1956 test at Bikini Atoll a few seconds after detonation.



XX-98

Operation Redwing, CHEROKEE Event - Fireball of the 21 May 1956 test detonation over Bikini Atoll. This was photographed from aircraft at 12,000 feet altitude about 50 miles NW of the target.



XX-108

Operation Redwing, CHEROKEE Event - Fireball of the 21 May 1956 test detonation over Bikini Atoll is shown with stem forming at base. This photograph was exposed from an aircraft at an altitude of 10,000 feet.



XX-08

Operation Redwing, SEMINOLE Event - The SEMINOLE Event was detonated 6 June 1956 on Enewetak Atoll. SEMINOLE had a yield of 13.7-kilotons.






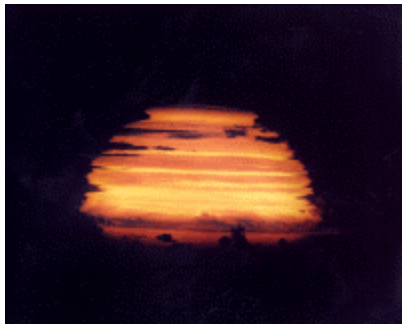
XX-46

Operation Redwing, SEMINOLE Event - SEMINOLE, a weapons related surface Event, was part of Operation Redwing and was detonated 6 June 1956 at Enewetak Atoll.



Operation Redwing, SEMINOLE Event - Operation Redwing, 6 June 1956 (SEMINOLE Event surface burst Enewetak).

XX-96	
 <p data-bbox="342 646 431 678">XX-48</p>	<p data-bbox="625 363 1422 468">Operation Redwing, SEMINOLE Event - SEMINOLE, a weapons related surface event, was part of Operation Redwing and was detonated 6 June 1956 at Enewetak Atoll.</p>
 <p data-bbox="342 1150 431 1182">XX-43</p>	<p data-bbox="625 867 1414 972">Operation Redwing, DAKOTA - The DAKOTA Event, part of Operation Redwing, was detonated from a barge at Enewetak Atoll on 25 June 1956.</p>
 <p data-bbox="342 1581 431 1612">XX-35</p>	<p data-bbox="625 1297 1422 1402">Operation Redwing, APACHE Event - The APACHE Event was detonated from a barge on 8 July 1956, on Enewetak Atoll.</p>



XX-36

Operation Redwing, APACHE Event - The APACHE Event was detonated from a barge on 8 July 1956 on Enewetak Atoll.



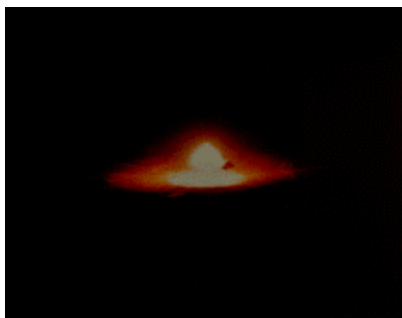
XX-40

Operation Plumbbob, BOLTZMANN Event - The BOLTZMANN Event was a 12-kiloton test detonated from a tower on the Nevada Test Site 28 May 1957. BOLTZMANN was a part of Operation Plumbbob.



XX-122

Operation Plumbbob, BOLTZMANN Event - A photograph of NATO observers attending BOLTZMANN Event (28 May 1957) detonation at Nevada Test Site.



Operation Plumbbob, FRANKLIN Event - The FRANKLIN Event was a 140-ton tower test detonated on 2 June 1957 at the Nevada Test Site.

315860



XX-12

Operation Plumbbob, PRISCILLA Event - The PRISCILLA Event was a 37-kiloton balloon test detonated on 24 June 1957 at the Nevada Test Site.



XX-10

Operation Plumbbob, PRISCILLA Event - The PRISCILLA Event was a 37-kiloton balloon test detonated 24 June 1957 at the Nevada Test Site.



XX-03

Operation Plumbbob, HOOD Event - The HOOD Event, was conducted at the Nevada Test Site on 5 July 1957, it was a 74-kiloton device exploded from a balloon.



XX-15

Operation Plumbbob, DIABLO Event - The DIABLO Event was detonated on 15 July 1957, at the Nevada Test Site from a 500 foot tower. It had a yield of 17-kilotons.



XX-30

Operation Plumbbob, JOHN Event - An air-to-air missile test code-named JOHN was detonated on 19 July 1957 as part of the Operation Plumbbob series.



XX-01

Operation Plumbbob, STOKES Event - The STOKES Event, conducted at the Nevada Test Site on 7 August 1957, was a 19-kiloton device exploded from a balloon.



XX-02

Operation Plumbbob, DOPPLER Event - The DOPPLER Event was conducted on 23 August 1957 at the Nevada Test Site. It was a balloon test at 1500-feet with a yield of 11-kilotons.



XX-115

Operation Plumbbob, DOPPLER Event - Nevada Test Site, 23 August 1957, the 13th. Event of Operation Plumbbob, code-named DOPPLER, is shown immediately after detonation at 5:30 AM PDT, from a balloon at an altitude of 1500 feet.



XX-70

Operation Plumbbob, SMOKY Event - The SMOKY Event was detonated on 31 August 1957.



Operation Plumbbob, SMOKY Event - The SMOKY Event was a weapons related tower test, detonated on 31 August 1957 at the Nevada Test Site.

XX-64



XX-14

Operation Plumbbob, FIZEAU Event - The FIZEAU Event was a 11-kiloton tower test detonated 14 September 1957 at the Nevada Test Site.



PLU 57-101

Operation Plumbbob, FIZEAU Event - Nevada Test Site, the cloud from FIZEAU, 19th nuclear event of the summer of 1957 test series (14 September 1957), begins its ascent to a height of about 40,000 feet.



XX-16

Operation Plumbbob, CHARLESTON Event - The CHARLESTON Event, part of Operation Plumbbob, was detonated from a balloon on 28 September 1957.



XX-32

Operation Hardtack I, UMBRELLA Event - The Umbrella Event was detonated on 8 June 1958 at the Enewetak Atoll.



XX-93

Operation Hardtack I - Thermonuclear detonation during the Pacific tests in 1958, Hardtack-I Operation.



XX-88

Operation Hardtack I - Thermonuclear detonation during the Pacific tests in 1958, Hardtack-I Operation.



XX-97

Operation Hardtack I - Thermonuclear detonation during the Pacific tests in 1958, Hardtack-I Operation.



XX-82

Operation Hardtack I - Thermonuclear detonation during the Pacific tests in 1958, Hardtack-I Operation.



XX-100

Operation Hardtack I - Thermonuclear detonation during the Pacific tests in 1958, Hardtack-I Operation.



XX-81

Operation Hardtack I - Thermonuclear detonation during the Pacific tests in 1958, Hardtack-I Operation.



XX-83

Operation Hardtack I - Thermonuclear detonation during the Pacific tests in 1958, Hardtack-I Operation.



XX-123

Operation Hardtack I - Thermonuclear detonation during the Pacific tests in 1958, Hardtack-I Operation.



XX-96

Operation Hardtack I - Thermonuclear detonation during the Pacific tests in 1958, Hardtack-I Operation.



XX-99

Operation Hardtack I - Thermonuclear detonation during the Pacific tests in 1958, Hardtack-I Operation.



XX-101

Operation Hardtack II, EDDY Event - Nevada Test Site, EDDY Event first detonation of 1958 fall series (19 September 1958) at the Nevada Test Site. This event was detonated from a balloon 500-feet above Yucca Flat (**Hardtack-II**).



XX-95

Operation Hardtack II, EDDY Event - Nevada Test Site, EDDY Event, first event of the 1958 fall series on 19 September 1958, at the Nevada Test Site. This event was detonated from a balloon 500-feet above Yucca Flat.



XX-89

Operation Hardtack II, LUNA Event - Nevada Test Site, debris and flames from the safety experiment, LUNA, rises over the desert at the Nevada Test Site, 21 September 1958 after the device was detonated.



XX-17

Operation Hardtack II, DeBACA Event - A mushroom cloud rises from the desert floor at the Nevada Test Site. The nuclear test, named DeBACA, was a balloon burst detonated 26 October 1958. Since July 1962, all NTS weapons tests have been underground.



XX-87

Operation Hardtack II, BLANCA Event - Nevada Test Site, underground nuclear detonation BLANCA of the Operation Hardtack II series, 1958 October.



XX-85

Operation Hardtack II, BLANCA Event - Nevada Test Site, underground nuclear detonation BLANCA of the Operation Hardtack II series, 1958 October.



XX-86

Operation Hardtack II, BLANCA Event - Nevada Test Site, underground nuclear detonation BLANCA of the Operation Hardtack II series, 1958 October.



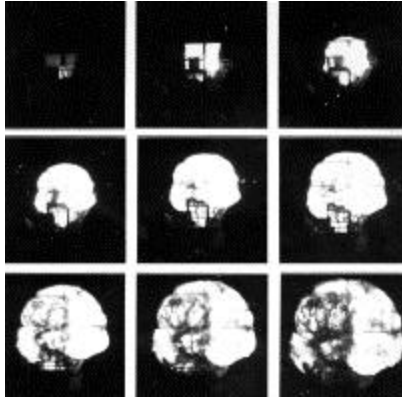
XX-84

Operation Hardtack II, BLANCA Event - Nevada Test Site, underground nuclear detonation BLANCA of the Operation Hardtack II series, 1958 October.



XX-94

Operation Hardtack II, BLANCA Event - Nevada Test Site, underground nuclear detonation BLANCA of the Operation Hardtack II series, 1958 October.



XX-62

Nuclear history in less than two-thousandths of a second is recorded by a camera capable of speeds in excess of 15,000 frames per second. This sequence, taken at the Department of Energy's Nevada Test Site in 1958, shows a low-yield detonation atop a 50-foot wooden tower. The camera was located less than 2,000-feet from Ground Zero.



XX-13

PLOWSHARE PROJECT, SEDAN Event was part of the Plowshare Program at the Nevada Test Site. It was detonated on 6 July 1962. Heavier particles began falling back to earth as the main cloud continued to rise. The base surge of dust began to roll along the desert floor.